

Notice of Allowability

Application No.

09/663,484

Examiner

Frantz B. Jean

Applicant(s)

MANOJIT SARKAR

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/24/06.
2. ☒ The allowed claim(s) is/are 1-5,7-9,11-18 and 20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 08/25/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other Attachment, pages 2-6.


FRANTZ B. JEAN
PRIMARY EXAMINER

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Claims 1-5, 7-9, 11-18, and 20 are allowed over the prior art of record and in light of applicant's arguments.

The IDS filed on 08/25/06 was considered by the examiner.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael DeSanctis on 11/02/06. The application has been amended as follows:

Please see attachment pages 2-6.

The following is an examiner's statement of reasons for allowance: The prior art of record fails to explicitly disclose configuring a network device/router by reading the meta information, converting the meta information into a meta runtime object model in which the objects are configured in accordance with the configuration information, loading the objects onto the network device/router, comparing the objects to a runtime object model and updating the runtime object model with differences identified by the comparison.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz B. Jean whose telephone number is 571-272-3937. The examiner can normally be reached on 8:30-6:00 M-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571 272 3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frantz Jean



FRANTZ B. JEAN
PRIMARY EXAMINER

Proposed Amendment

Amendments to the Claims

Please amend claims 1, 8, 16 and 17, without prejudice.

Please cancel claims 6, 10 and 19, without prejudice

Listing of Claims:

1. (Currently Amended) A computerized method comprising:
 - creating a metadata file, said metadata file defining objects representative of a configuration of components of a router;
 - reading the metadata file;
 - converting the metadata file into an object model having at least one object; [[and]]
 - configuring the router by loading the objects onto the router[.];
 - comparing by the router the objects of the object model to a runtime object model; and
 - updating the runtime object model with differences identified by the comparison.
2. (Original) The computerized method of claim 1, wherein loading the objects onto the router loads the objects into an SNMP (Simple Network Management Protocol) MIB (Management Information Base).
3. (Previously Presented) The computerized method of claim 1, wherein the metadata file comprises an American Standard Code for Information Interchange (ASCII) formatted file.
4. (Previously Presented) The computerized method of claim 1, wherein converting the metadata file includes creating a hash table of attribute names and attribute values from the metadata file.

5. (Previously Presented) The computerized method of claim 1, wherein converting the metadata file comprises converting a required subset of the metadata into an object model.
6. (Cancelled)
7. (Previously Presented) The computerized method of claim 1, further comprising:
 - reading a runtime object model from the router;
 - comparing the runtime object model to metadata in the metadata file; and
 - updating the metadata file with differences identified by the comparison.
8. (Currently Amended) A method comprising:
 - defining a plurality of objects that represent components of a network device by providing, in one or more metadata files accessible by a plurality of applications, meta information regarding the plurality of objects, including descriptions of the plurality of objects, configuration information associated with each of the plurality of objects and information regarding relationships among the plurality of objects in the form of network component class descriptions; [[and]]
 - configuring a network device based on the meta information by reading the meta information, converting the meta information into a meta runtime object model including the plurality of objects configured in accordance with the configuration information and loading the plurality of objects onto the network device[.];
 - updating a current configuration of the network device based on the meta information by
 - responsive to an update to the one or more metadata files, reading the meta information from the one or more metadata files;
 - converting the meta information into the meta runtime object model;
 - comparing objects of a current network device runtime object model to the meta runtime object model; and

updating the network device runtime object model to account for differences identified by said comparing.

9. (Previously Presented) The method of claim 8, wherein said configuring a network device based on the meta information comprises restoring the network device to an original configuration.
10. (Cancelled)
11. (Previously Presented) The method of claim 8, further comprising updating the one or more metadata files to reflect a current configuration of the network device by
 - identifying objects of a current network device runtime object model;
 - reading the meta information from the one or more metadata files;
 - converting the meta information into the meta runtime object model;
 - comparing the objects of the current network device runtime object model to the meta runtime object model;
 - updating appropriate files of the one or more metadata files to account for differences identified by said comparing.
12. (Previously Presented) The method of claim 8, wherein said loading the plurality of objects onto the network device comprises loading the plurality of objects into a Simple Network Management Protocol (SNMP) Management Information Base (MIB).
13. (Previously Presented) The method of claim 8, wherein the one or more metadata files comprise American Standard Code for Information Interchange (ASCII) formatted files.
14. (Previously Presented) The method of claim 8, wherein converting the meta information into a meta runtime object model comprises creating a hash table of attribute names and attribute values from the one or more metadata files.

15. (Previously Presented) The method of claim 8, wherein converting the meta information into a meta runtime object model comprises converting only a required subset of the meta information into the meta runtime object.
16. (Currently Amended) The method of claim [[10]] 8, wherein said updating the network device runtime object model to account for differences comprises disregarding unchanged meta information.
17. (Currently Amended) A system comprising:
- a meta information means for defining meta information in one or more metadata files regarding a plurality of objects that represent components of a network device in the form of network component class descriptions, the network component class descriptions including descriptions of the plurality of objects, configuration information associated with each of the plurality of objects and information regarding relationships among the plurality of objects; and
 - a network device configuration means, responsive to the meta information means, for
 - configuring a network device based on the meta information by reading the meta information, converting the meta information into a meta runtime object model including the plurality of objects configured in accordance with the configuration information and loading the plurality of objects onto the network device[[]]; and
 - updating a current configuration of the network device based on the meta information by, responsive to the meta information means, reading the meta information from the one or more metadata files, converting the meta information into the meta runtime object model, comparing objects of a current network device runtime object model to the meta runtime object model, and updating the network device runtime object model to account for differences identified by said comparing.

***** DO NOT ENTER *****

***** DRAFT – FOR DISCUSSION PURPOSES ONLY *****

18. (Previously Presented) The system of claim 17, wherein the network device configuration means restores the network device to an original configuration based on the meta information.
19. (Cancelled)
20. (Previously Presented) The system of claim 17, wherein the network device configuration means is further configured to update the one or more metadata files to reflect a current configuration of the network device by
 - identifying objects of a current network device runtime object model;
 - reading the meta information from the one or more metadata files;
 - converting the meta information into the meta runtime object model;
 - comparing the objects of the current network device runtime object model to the meta runtime object model; and
 - updating appropriate files of the one or more metadata files to account for differences identified by said comparing.